

## AMENDMENTS TO THE CLAIMS

### Claims 1-17 (Cancelled)

18. (New) A process for the preparation of an olefin copolymer comprising:

(a) providing a catalyst system comprising a metallocene catalyst component characterized by the formula:



wherein:

Cp comprises a cyclopentadienyl ring; Flu comprises a fluorenyl ring; R'' comprises a structural bridge imparting stereorrigidity to the component; each R is the same or different and is an organic group; m is an integer of from 1-4; each R' is the same or different and is an organic group; n is an integer of from 0-8; M is a metal atom from Group IVB of the Periodic Table or is vanadium; and each Q is a hydrocarbon having from 1-20 carbon atoms or is a halogen;

(b) contacting said catalyst system with at least two olefins under polymerization conditions to copolymerize said olefins to produce a random copolymer in which the monomers of said olefin are distributed relatively evenly throughout the length of each polymer molecule of said copolymer;

(c) recovering said copolymer from said reaction zone.

19. (New) The process of claim 18 wherein at least one group R is positioned on the cyclopentadienyl ring at a location distal to the bridge R''.

20. (New) The process of claim 18 wherein at least one group R comprises a bulky group of the formula  $ZR^*_3$ , wherein Z is an atom from group IVA of the Period Table and each

R\* is the same or different and is a hydrogen or a hydrocarbyl group having from 1-20 carbon atoms.

21. (New) The process of claim 20 wherein at least one additional group R comprises a group of the formula YR#, wherein Y is an atom from group IVA of the Periodic Table, and each R# is the same or different and is a hydrogen or a hydrocarbyl group having from 1-7 carbon atoms.

22. (New) The process of claim 21 wherein the cyclopentadienyl ring comprises a substituent ZR\*, distal to the bridge R" and a substituent YR#, proximal to the bridge and non-vicinal to ZR\*.

23. (New) The process of claim 18 wherein the fluorenyl group is substituted with at least one substituent at the 3 or 6 position, or at the 2 or 7 position.

24. (New) The process of claim 23 wherein said fluorenyl group is substituted with a first substituent at the 3 or 6 position and with a second substituent at the 2 or 7 position.

25. (New) The process of claim 23 wherein said fluorenyl group is substituted with substituents at positions 3 and 6 or at positions 2 and 7.

26. (New) The process of claim 21 wherein ZR\* is selected from the group consisting C(CH<sub>3</sub>)<sub>3</sub>, C(CH<sub>3</sub>)<sub>2</sub>Ph, CPh<sub>3</sub>, and Si(CH<sub>3</sub>)<sub>3</sub>.

27. (New) The process of claim 26 wherein YR# comprises CH<sub>3</sub>.

28. (New) The process of claim 18 wherein R" comprises a silyl radical or a hydrocarbyl radical having at least one carbon atom to form the bridge.

29. (New) The process of claim 28 wherein M is Ti, Zr or Hf.

30. (New) The process of claim 29 wherein Q is Cl or methyl.

31. (New) The process of claim 18 wherein one of said olefins is ethylene.

32. (New) The process of claim 32 wherein another of said olefins is propylene.

33. (New) The process of claim 32 wherein said copolymer is an ethylene/propylene copolymer having a melting temperature within the range of 100-110° C.

34. (New) The process of claim 33 wherein said ethylene/propylene copolymer has a melting temperature within the range of 103-107° C.

35. (New) The process of claim 18 wherein at least one group R is positioned on the cyclopentadienyl ring at a location distal to the bridge R" and at least another group is positioned on the cyclopentadienyl ring at a location proximal to the bridge and non-vicinal to the at least one group R.

36. (New) The process of claim 35 wherein said at least one group R which is positioned distal to the bridge is bulkier than the at least another group R which is proximal to the bridge.

37. (New) The process of claim 36 wherein the fluorenyl group is substituted with at least one substituent at the 3 or 6 position, or at the 2 or 7 position.